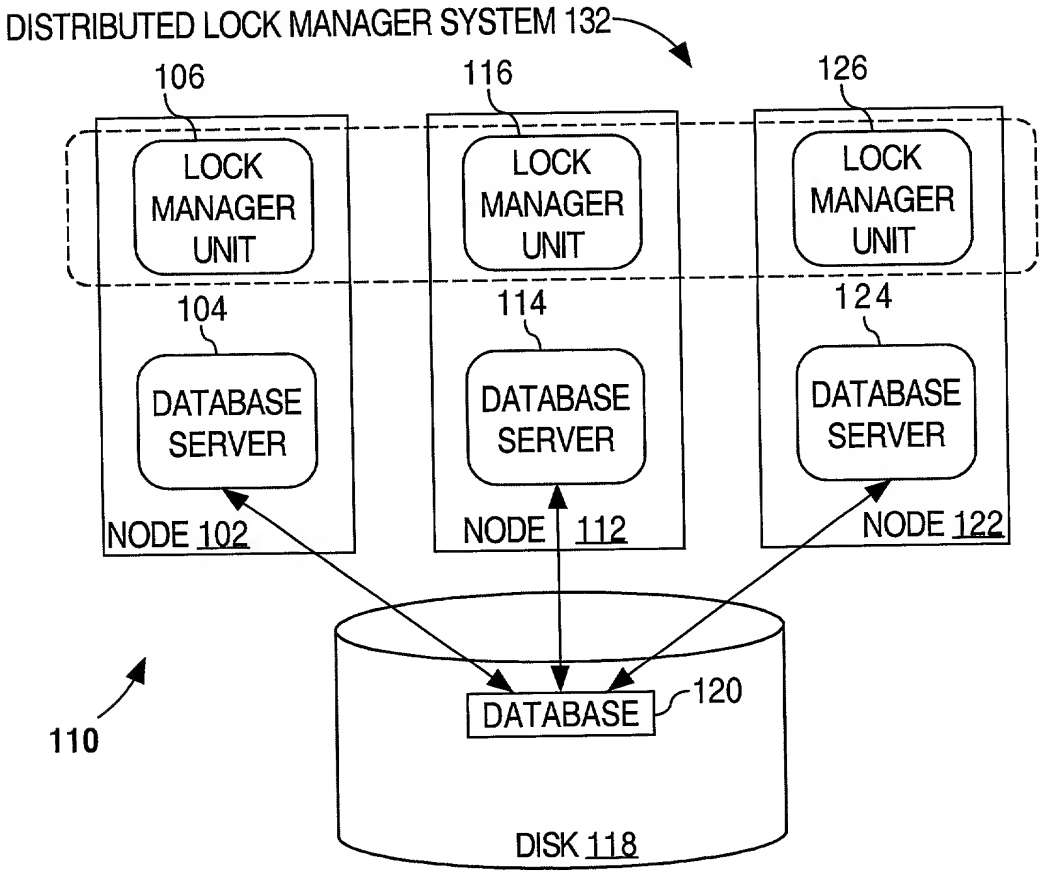

FIG. 1

Express Mail No. EL734779955US

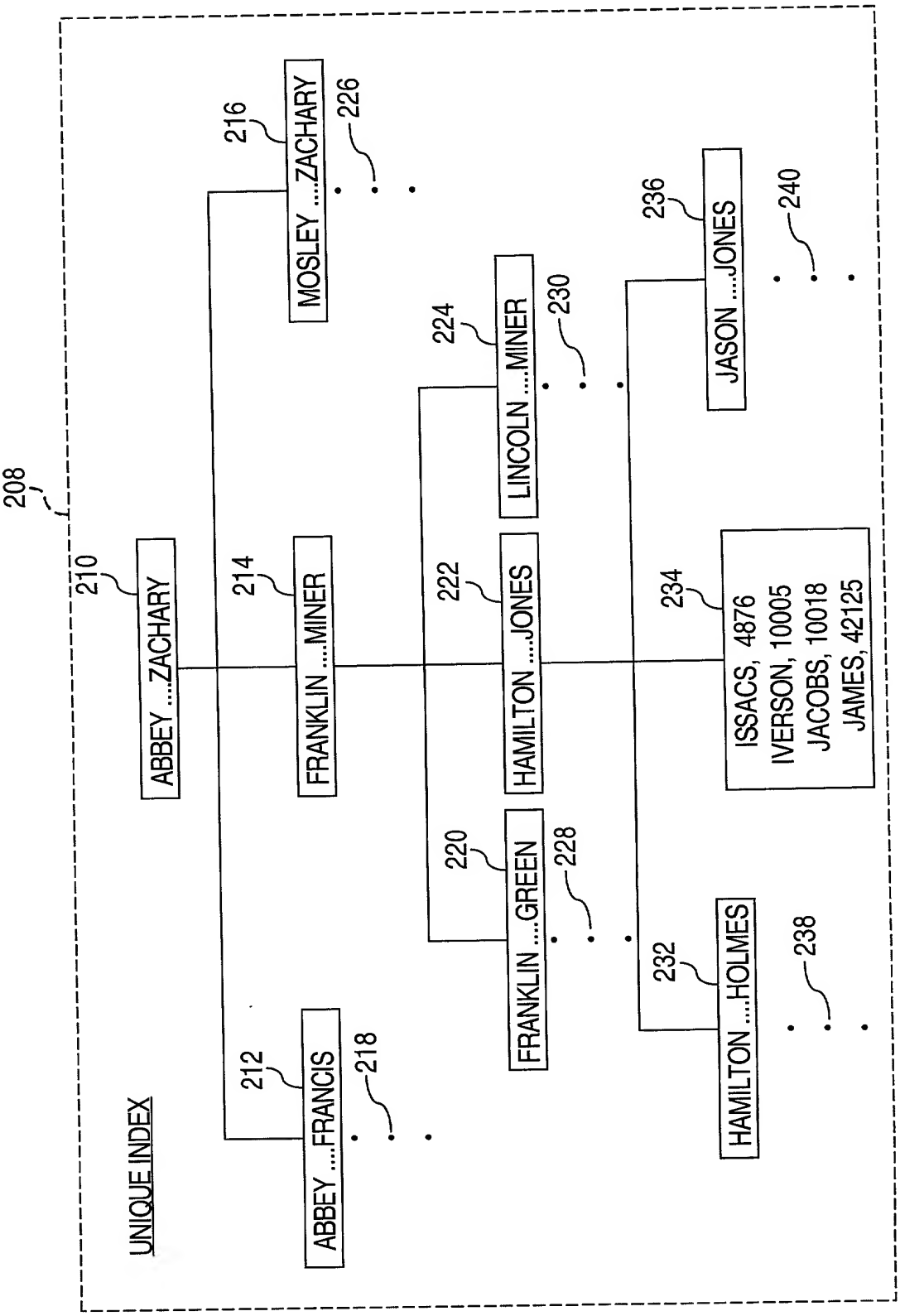

FIG. 2

10056746 - 012202

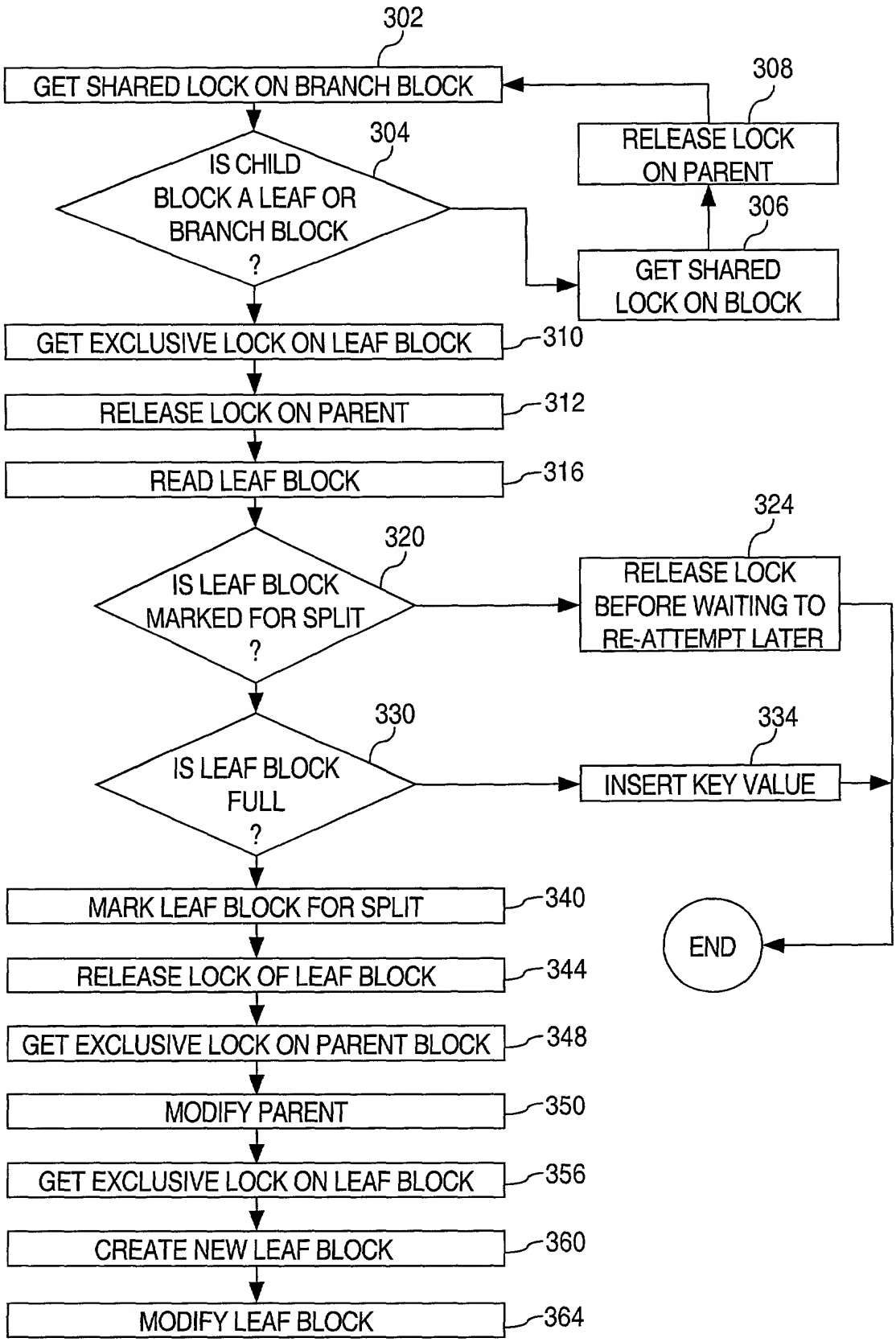

FIG. 3

20020152262

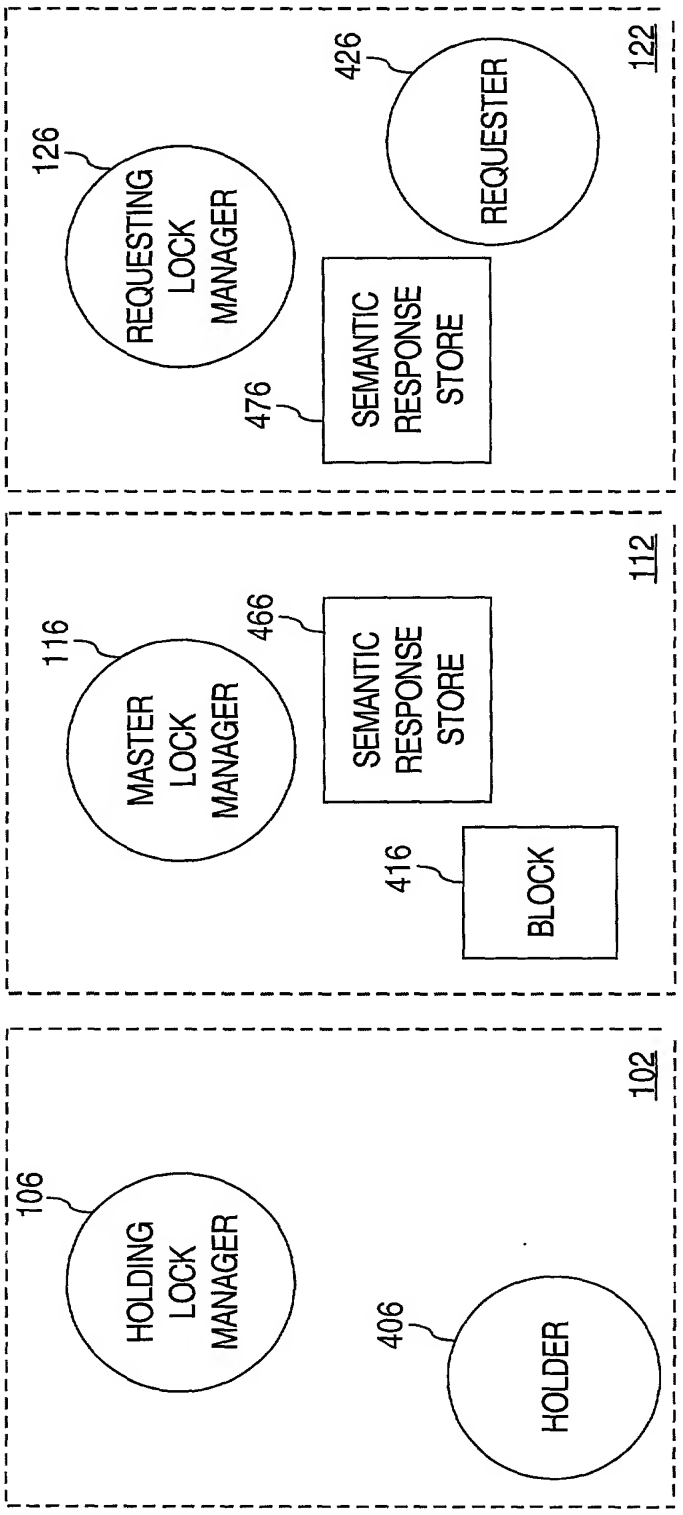

FIG. 4

Attorney Docket No. 50277-1763

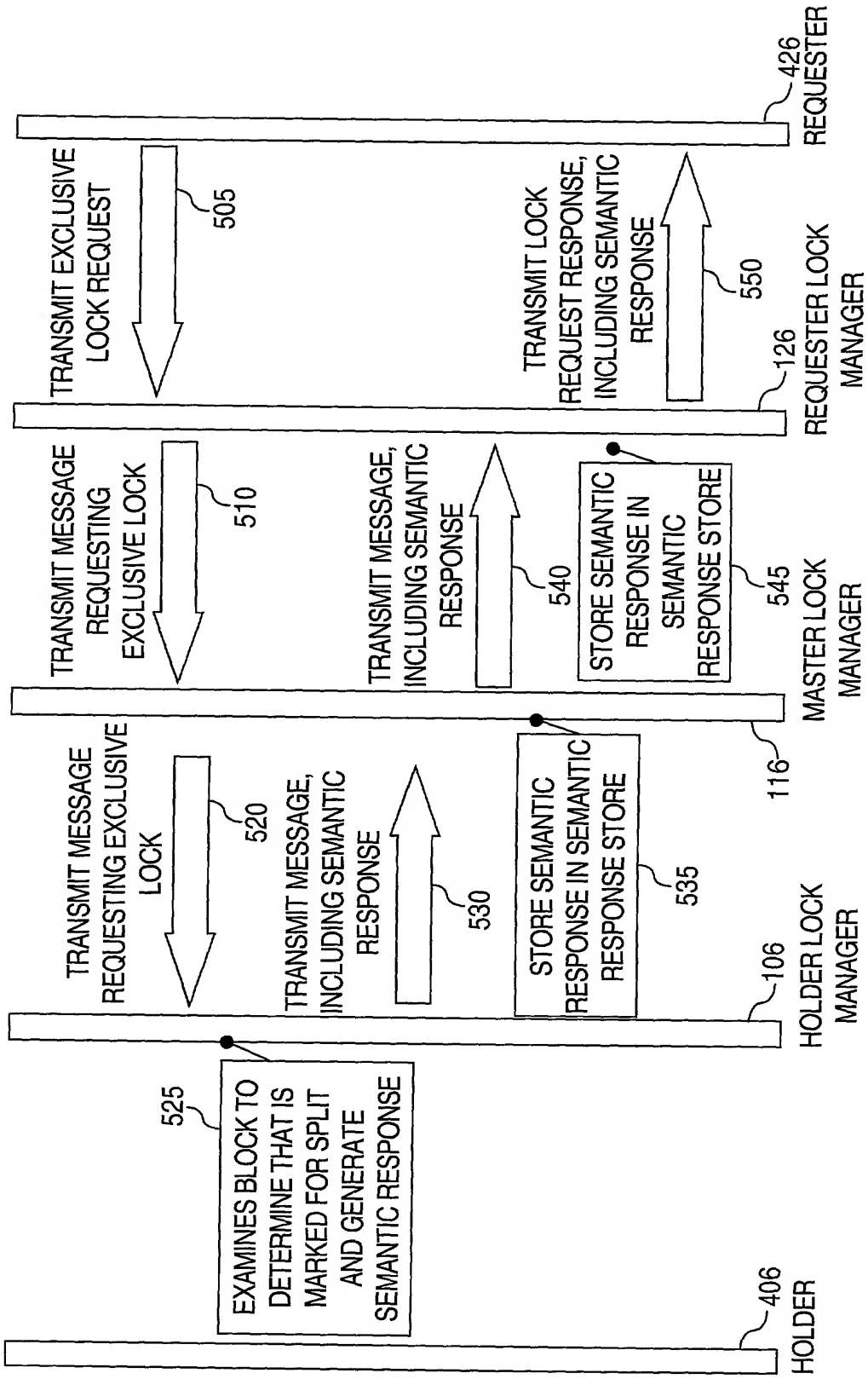
406
HOLDER
525
EXAMINES BLOCK TO DETERMINE THAT IS MARKED FOR SPLIT AND GENERATE SEMANTIC RESPONSE
106
HOLDER LOCK MANAGER
TRANSMIT MESSAGE REQUESTING EXCLUSIVE LOCK
520
TRANSMIT MESSAGE, INCLUDING SEMANTIC RESPONSE
530
STORE SEMANTIC RESPONSE IN SEMANTIC RESPONSE STORE
535
116
MASTER LOCK MANAGER
TRANSMIT MESSAGE REQUESTING EXCLUSIVE LOCK
510
TRANSMIT MESSAGE, INCLUDING SEMANTIC RESPONSE
540
STORE SEMANTIC RESPONSE IN SEMANTIC RESPONSE STORE
545
126
REQUESTER LOCK MANAGER
TRANSMIT EXCLUSIVE LOCK REQUEST
505
TRANSMIT LOCK REQUEST RESPONSE, INCLUDING SEMANTIC RESPONSE
550
426
REQUESTER

FIG. 5

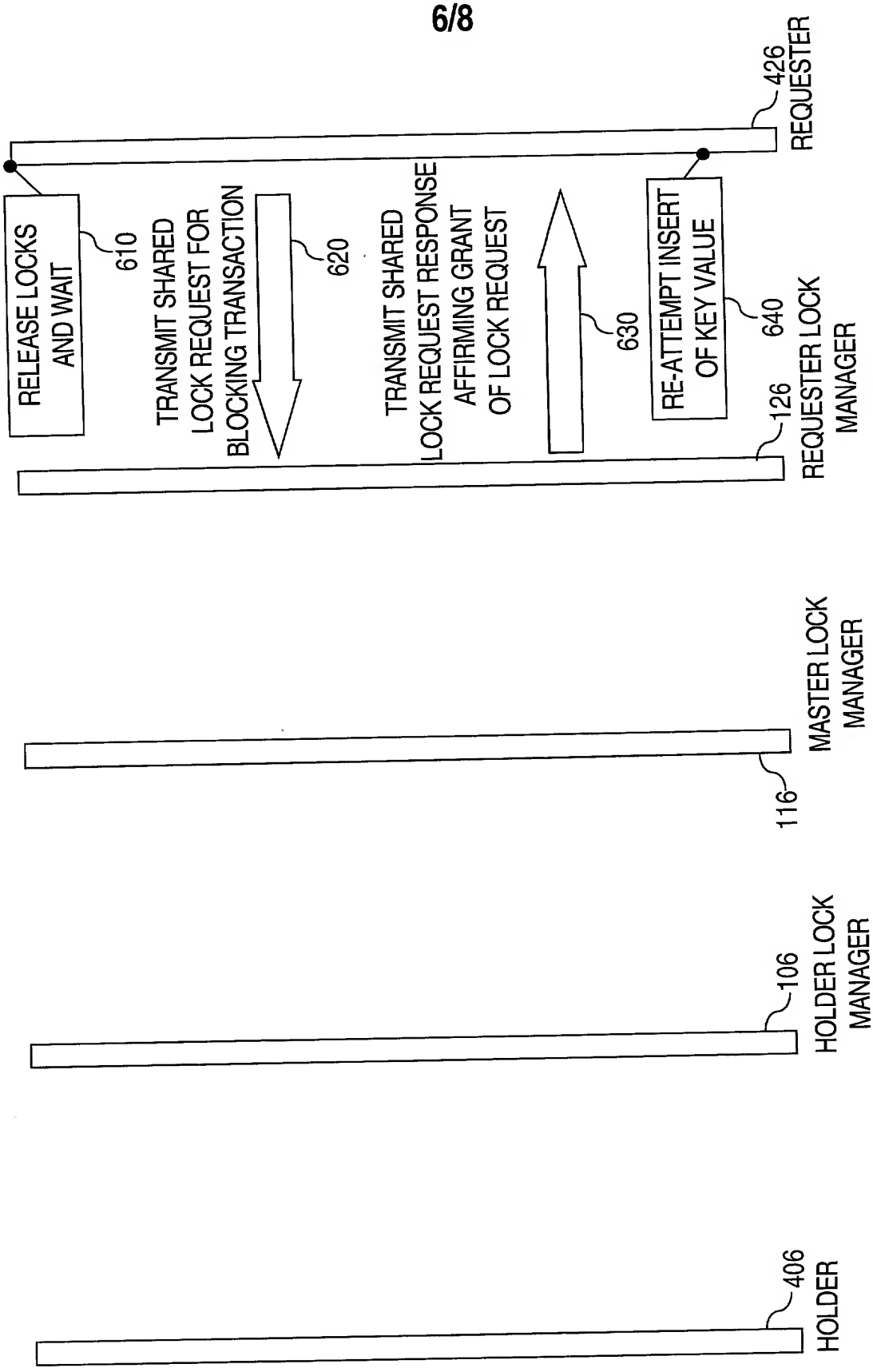
426
REQUESTER
RELEASE LOCKS AND WAIT
610
TRANSMIT SHARED LOCK REQUEST FOR BLOCKING TRANSACTION
620
TRANSMIT SHARED LOCK REQUEST RESPONSE AFFIRMING GRANT OF LOCK REQUEST
630
RE-ATTEMPT INSERT OF KEY VALUE
640
126
REQUESTER LOCK MANAGER
116
MASTER LOCK MANAGER
106
HOLDER LOCK MANAGER
406
HOLDER

FIG. 6

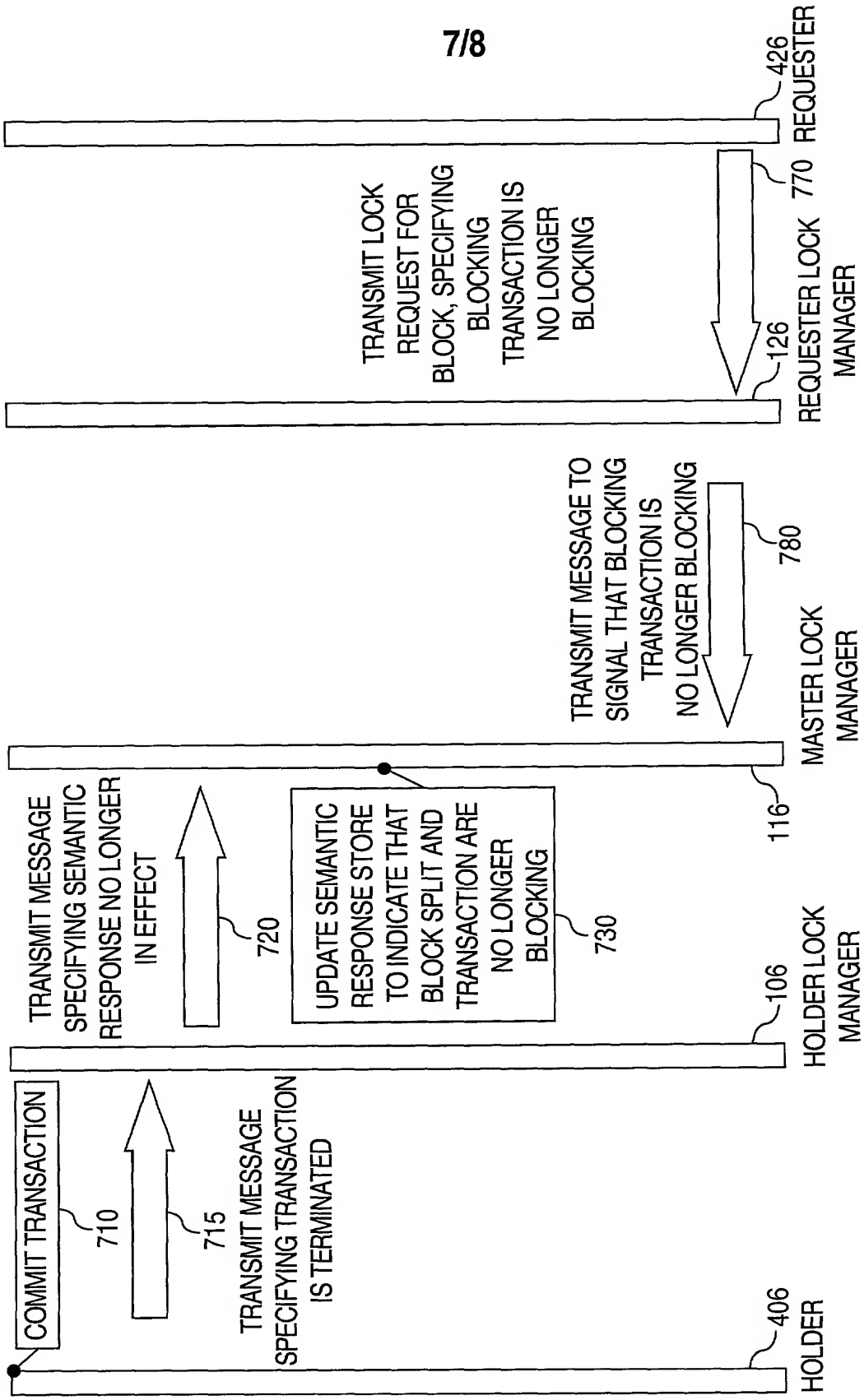
406
HOLDER
COMMIT TRANSACTION
710
715
TRANSMIT MESSAGE SPECIFYING TRANSACTION IS TERMINATED
106
HOLDER LOCK MANAGER
TRANSMIT MESSAGE SPECIFYING SEMANTIC RESPONSE NO LONGER IN EFFECT
720
UPDATE SEMANTIC RESPONSE STORE TO INDICATE THAT BLOCK SPLIT AND TRANSACTION ARE NO LONGER BLOCKING
730
116
MASTER LOCK MANAGER
TRANSMIT MESSAGE TO SIGNAL THAT BLOCKING TRANSACTION IS NO LONGER BLOCKING
780
126
REQUESTER LOCK MANAGER
TRANSMIT LOCK REQUEST FOR BLOCK, SPECIFYING BLOCKING TRANSACTION IS NO LONGER BLOCKING
770
426
REQUESTER

FIG. 7

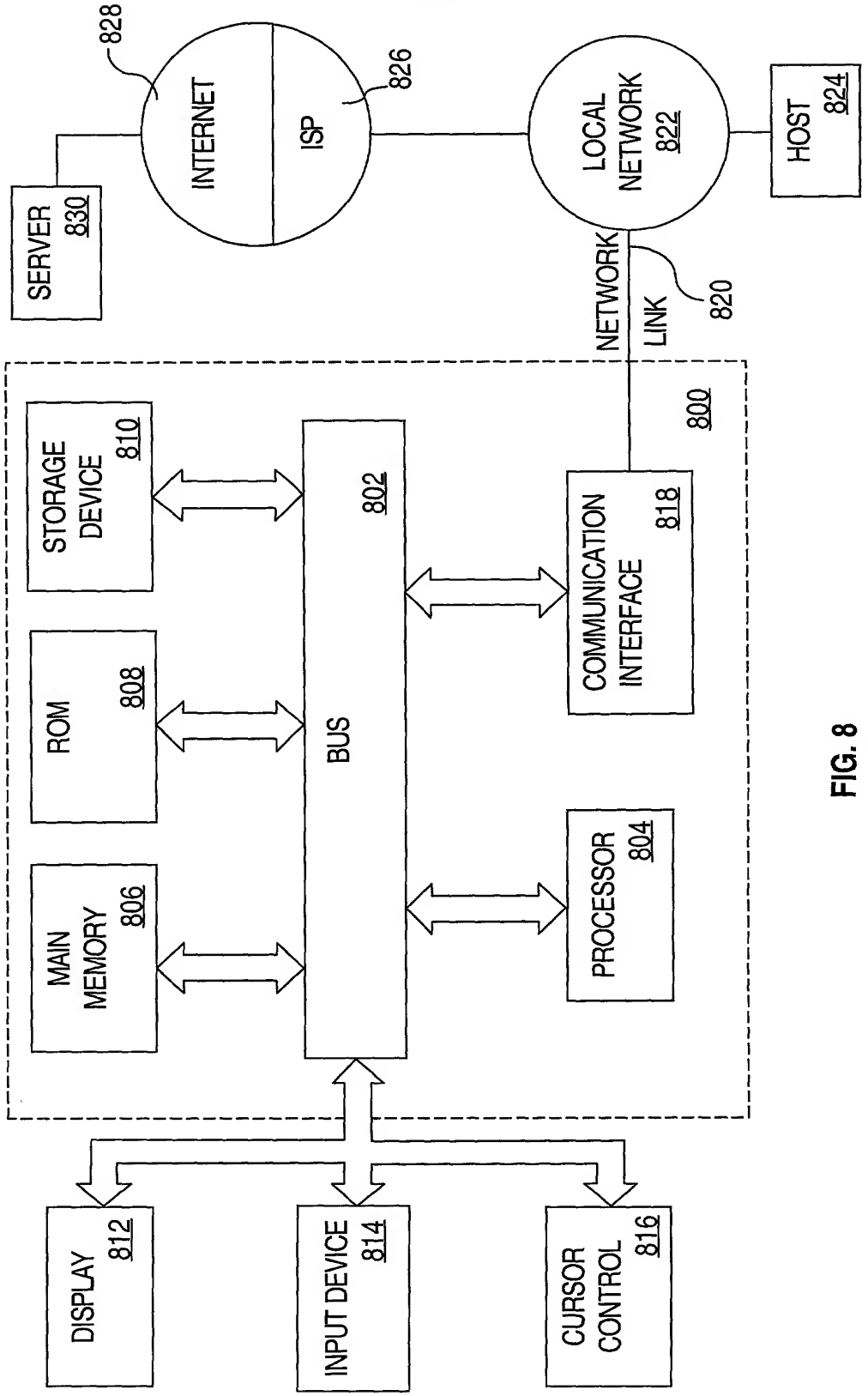
828
INTERNET
ISP
826
LOCAL NETWORK 822
HOST 824
SERVER 830
NETWORK LINK 820
800
STORAGE DEVICE 810
ROM 808
MAIN MEMORY 806
BUS 802
COMMUNICATION INTERFACE 818
PROCESSOR 804
DISPLAY 812
INPUT DEVICE 814
CURSOR CONTROL 816

FIG. 8